# **My NASA Data - STEM Career Connections**

## **SCIENCE: Botanists and Plant Scientists**



### **Education**

Botanists require a minimum of a bachelor's degree in a science field such as botany, plant science, plant biology or general biology. In some of the academic programs, students also study mathematics, chemistry, physics, and biology. Incorporating these related fields with biology may create opportunities to do research as a laboratory technician or technical assistant. Students who want to become a botanist that works in the environmental, commercial, horticulture or agriculture sectors must receive a master's degree. For those who wish to work in research or in a university position, they must obtain a Ph.D. in one of the previously listed fields.

### **Related Fields**

- Taxonomist <u>Link</u>
- Agronomist <u>Link</u>
- Ecologist Link
- Mycologist <u>Link</u>
- Plant Breeder <u>Link</u>

- Horticulturist Link
- Biophysicist Link

### **Work Description**

Botanists research plant characteristics like their physiological processes, their evolutionary history, resistance to disease, relationships to other parts of the Biosphere and within the Earth System.

Many botanists work in different locations; some may work indoors in laboratories and offices conducting experiments while others may work in agriculture and spend much of their time outdoors. Some botanists may also discover new plant species and share their learning with the public through tours and events.

### Why is this job Important?

Botanists make discoveries and develop solutions that result in new medicines, new types of crop cultivation, and new understandings of the importance of plants in our world. When they share information about the plant world with the public, they encourage a deeper appreciation of the natural world.

#### **NASA Connections**

### NASA Job Title Examples:

- Biological Sciences
- Microbiology
- Botanist
- Plant Physiologist

### **NASA Career Links:**

- NASA Careers Link
- NASA Internships & Fellowships Pathways <u>Link</u>
- NASA Student Volunteer Program <u>Link</u>
- Working for NASA <u>Link</u>